# Questions & Answers Marshfield Coop Central WI Coop 111 S Peach Ave, Marshfield WI 54449-4541-11 02-72-000418

In looking over the bid spec for the Marshfield Coop Central WI Coop PECFA bid site, you state, as a Minimum Remedial Requirement, that the winning bidder produce, "a remedial action plan which includes free product removal appropriate to the site and a groundwater monitoring network/program that will be able to demonstrate RNA, showing a stable if not decreasing groundwater contaminate concentration trend."

Without having seen the SI report, the average hydraulic conductivity beneath such a site in a flat-lying area such as characterizes Marshfield, is likely to exceed 10E-5 cm/s, which would make it "permeable material."

NR 746.07(2)(d)4 states that closure of sites underlain by permeable material requires the Mann-Kendall or Mann-Whitney showing of a decreasing trend. A merely stable trend is not acceptable if NR 746 is the closure tool being contemplated.

Therefore, in this spec, are we to assume that a stable trend, absent any other risk factors, would be acceptable in the permeable material underlying this site, if an NR 726 closure is sought? More to the point, are we to conclude that, in an NR 726 closure at this site, that DNR will not be looking to address the required "reasonable period of time" issues in NR 726.05(2)(b)1.f. and NR 726.05(2)(b)2., both of which are specifically excluded as criteria in the NR 746 rule?

Consultants, using their own judgment, are to bid a project such that they achieve clean up for the lowest cost. The agency does not mandate that the consultant uses NR 746 or NR 726 criteria for closure. No matter which closure rule they use, a consultant will need to meet the requirements of the closure chapter they choose.

### Furthermore:

NR 746 requires that a decreasing trend be demonstrated (using Mann-Kendall or Mann- Whitney tests) for all contaminants in monitoring wells along the centerline of the plume. If NR 746 requirements are met, the rule assumes standards will be met within a reasonable period of time & no additional effort is required.

NR 726 allows consultants to argue for NA using a stable or decreasing trend in the contaminant plume, however the consultants must have data or arguments to establish that:

NR 726.05(2)(b) 1. f. The concentration and mass of a substance and its breakdown products in groundwater have been reduced due to naturally occurring physical, chemical and biological processes as necessary to adequately protect public health and the environment, and prevent groundwater contamination from migrating beyond the boundaries of the property or properties for which groundwater use restrictions have been recorded, except that sites contaminated with petroleum products discharged from petroleum storage tanks that satisfy all of the risk screening criteria in s. NR 746.06 (2) and are eligible for closure under s. NR 746.07 (2) or 746.08 (2) shall be considered to have satisfied the criterion in this subdivision paragraph without having to provide supporting documentation other than documentation required by ch. NR 746.

## AND

NR 726.05(2)(b)2. Natural attenuation will bring the groundwater into compliance with ch. NR 140 groundwater quality standards within a reasonable period of time, considering the criteria in s. NR 722.07, except that sites contaminated with petroleum products discharged from petroleum storage tanks that satisfy all of the risk screening criteria in s. NR 746.06 (2) and are eligible for closure under s. NR 746.07 (2) or (4) or 746.08 (2) or (4), shall be considered to have satisfied the criterion in this subdivision without having to provide supporting documentation other than documentation required by ch. NR 746.

The DNR has been very clear that both of the above quoted sections of NR 726 apply & must be satisfied if NR 726 closure is sought. When NR 746 criteria are met the code state that these sections are satisfied by the NR 746 requirements (that is, by meeting NR 746, these conditions are satisfied. There are no exemptions or exceptions given or implied in meeting these requirements).

As an afterthought it might have been better to say that, "The consultant must establish that natural attenuation is effective in reducing the concentration & mass of the contaminants in groundwater and establish that groundwater standards will be met within a reasonable period of time. These 2 concepts underlie both NR 726 & NR 746."

What are the conditions of the manhole covers for the monitoring wells and piezometers, including those off-site, MW-9 and MW-9P?

### Unknown.

The property boundary appears to run through the middle of the bulk plant area. Has the property owner to the north of the site, Wisconsin Central Railroad, given their concurrence to excavate petroleum contaminated soil on their right of way?

This is not an issue. WCL requires leased land to be restored to prior contaminant free condition. Excavation beyond the berm border next to the

railroad spur would have to be arranged with WCL. The spur line and the Co-op are owned in easement by the Wisconsin Department of Transportation. In about three years the spur line and adjacent co-op property will become part of the State Highway 13 corridor.

3. Is there a basement under the east end of the Feed Mill building?

No.

4. How much free product has been recovered from MW-5?

Total volume has never been reported.

5. Is a table of free product depths for the dates of removal available?

No table is available.

# Question:

6. Have all 8 of the above ground storage tanks been removed?

Yes.